BATTLES OF NAPOLEON

™

EDITOR RULES

LIMITED WARRANTY

WHAT TO DO IF YOU HAVE A DEFECTIVE DISK

Each of our games undergoes extensive playtesting prior to its release. Through this process we hope to uncover and correct any errors in programming. However, due to the complex nature of our simulations, some program errors may go undetected until after publication. In addition to errors in the program, there are occasionally problems with the disk itself. We experience the industry standard of approximately a 3 to 5% failure rate of duplicated disks. Before assuming that a disk is defective, make sure to check your disk drive. Up to 95% of the disks returned to us as defective will run fine on our computer systems. Often the problem is with a disk drive that needs servicing for alignment, speed, or cleaning.

Should you have a defective disk, please return the disk only (keep all other parts of the game) to our Customer Support Department, along with a note describing the problem you have encountered. A replacement disk will be provided upon our receipt of the defective disk.

Should you uncover an error in the program, return both your game disk and any "save game" disks to our Customer Support Department. Please enclose a description of what was taking place in the game when the error occurred. Upon correction of the program error, we will return an updated disk to you.

Always make sure to include your name, address, and daytime telephone number with any correspondence. We will do our best to see that any problems are corrected as soon as possible.

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APPLE II AND IBM COMPATIBLE COMPUTER INFORMATION:

Many of our games will work on Apple II and IBM compatible computers. Most of our games will work on an Apple II GS in the Apple II emulation mode.

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BATTLES OF
NAPOLEON ™

EDITOR RULES

14.0 SCENARIO EDITOR

The Scenario Editor is a very powerful tool that will allow you to build your own scenarios or modify existing ones. You can even modify the tables that the program uses during the game execution and the objectives that the computer solitaire player uses (see section 19.0). However, because of its complexity, it is highly recommended that you use the Editor only after you are fairly familiar with the game system.

Before you can create a new scenario, even a random one, you must have a blank disk ready. If it has not been formatted into an SSI save disk, you will be prompted and told how to initialize the disk for use by the program. This blank disk is used by the Editor as a place to store data during the scenario creation process.

To access the Scenario Editor from the Main Menu, choose "C" to create a random new scenario, "G" to enter the Editor to generate a new scenario, and "E" to edit a new scenario or saved game.

14.1 Scenario Creation Process

Whether you are creating a new scenario, editing an old one, or a combination of the two, you must follow a very specific and fixed path in the creation/editing of

your scenario. The steps are as follows:

> Army Editing/Building
> Map Editing/Building
> Unit Deployment
> Set Squares
> Tables Editing

This path may not be altered and must be followed through to completion. Once you have gone through all five steps with a scenario, performing the necessary tasks in each, you will be asked to input the name of the new scenario and the scenario will be saved. If you skip any steps and you are not editing an existing scenario, the information needed will be brought in from the Quatre Bras scenario. For example, if you skipped deployment, your units would be in identical x,y positions to the Quatre Bras scenario. It is highly recommended that you perform all the steps before completing the scenario. Remember, though, that you may always come back and edit the scenario.

Once at the end of the scenario creation process, you will be prompted to rename the scenario. Because the scenario is automatically saved under the name "NAP" during the creation process, you should rename it to a name of your choosing.

14.2 Create a Random New Scenario

This option, when selected from the Main Menu, will generate a completely random scenario for instant enjoyment. When you select this option, you will be prompted to have an SSI save disk ready. The Editor must save the scenario files to the disk dur-

ing the creation process. If you do not have one ready, you may format one during this step. The next option will ask you how many selection points to use for the French side and then for the Allied side. This represents the size of the forces involved (See section 15.31 for a more thorough explanation of purchase points). After the computer has generated the units to be used on each side, it will save the army files to the save disk you used. The computer will then prompt you for several disk swaps and will save each part of the scenario as it is created. Once everything is ready, the units will be deployed, the objectives will be set, and you will be asked to rename the file. Because the file is automatically saved under the name "NAP", you should now name the file as desired. Once you have done this, the game will take you to the Game Menu (see section 4.1) and the game will begin.

14.3 Scenario Creation Parameters and Explanations

Because of the complexity of the scenario Editor, it is imperative that the basic concepts behind the Editor be understood before using the Editor to create a scenario. In order to preserve maximum flexibility, the Editor will allow you to create whole scenarios or just parts of scenarios. As an example, you could begin the scenario creation process by creating an Allied army and a French army, and then save them off separately so that you could use that army in another scenario. You can also have the computer randomly generate any part of the scenario that you wish. For instance, you could want to control the army creation step, but want the computer to randomly generate the map and the deployment. Again, this is possible.

As a rule, if you are trying to create a new scenario from scratch, you should follow all of the steps in sequence. You may use the (R)andom function for sections you don't wish to create. In addition, you should normally use the default settings for the tables as these are to be considered "historical" in most circumstances.

15.0 ARMY EDITOR

Upon entering the Editor, the first menu you will be presented with will be the Main Menu for the Army Editor. This menu will allow you to create the two sides for the scenario you are creating. At this point, you should examine section 15.2, the Main Menu description.

The first, and most important thing to learn about the Army Editor is the concepts behind leaders and their command structures. During the usage of the Army Editor, you will have to go through three distinct steps: Leader Creation, Unit Assignment, and Unit Creation.

During the Leader Creation step, you will choose the names, levels of command, and bonus levels (0 to 15) for the leaders and determine the order of which leaders report to which other leaders. The most important thing to understand in the Leader Creation step is how Leader Organization works. All leaders have a higher level commander that they report to. This determines the order of command and is more fully explained below.

In the Unit Assignment step, you assign the units their names, their sizes (from Batt. to Brig.), and tell them which leaders they report to. This determines the Unit Organization.

Finally, you will give the specifics on each unit in the army that you are editing, giving such details as number of men, weapon, and so on.

15.1 Organization

In The Battles of Napoleon, as in history, all military organizations are driven by Command Control. All units have leaders that answer to other higher level leaders, who in turn answer to their superior leaders. This organization is the most difficult thing to understand in the Editor, and is completely vital to the game.

Leaders are organized into a command structure that the game uses during the Command Control phases of the game. In general, an army will consist of an Army Commander, with 3 or 4 Corps Commanders under him, with 2 or 3 Division Leaders under each of the Corps Commanders. Because a number of strange organizations occurred in historical situations, we have allowed the maximum flexibility possible in the creation of the Leader Organization of an army. Therefore, the computer assumes nothing in regards to the Leader Organization. You must tell the computer which leaders report to which other leaders and what command level they are. You must put lower level commanders under the command of higher level commanders. If you don't, the game will prompt you to change the leaders that don't fit into the command structure when you Reorganize (see 15.41).

There is a similar requirement for the Unit Organization. It is imperative that all units be under the command of a leader. If they aren't, then they will have no objectives and will become independent units. This is a mistake because the number of OP points received will be lower than normal and the "independent units" will not be forced to obey "historical" restrictions.

15.11 HISTORICAL DESIGNATIONS AND ORGANIZATIONS
Although this editor will not prohibit you from creating non-historical organizations, it is suggested that quasi-historical organizations be used in most cases. Here are a few examples to help you understand how to do that.

The sizes for units in The BATTLES OF NAPOLEON go as follows:

Battalion – A group of men ranging from a couple of hundred to over a thousand men in size. Battalions were generally organized into Regiments (for the French and many Allies) or Brigades (for the British).

Regiment – Generally a group of 2 to 5 battalions that operated together. Several of the scenarios use demi-regiments (1/2 regiment units).

Brigade – This is the next level of command up from the Regiment. Although the British generally didn't use Regiments for combat organizations, they did use Brigades. Brigades usually consist of 2 regiments (or as many as 8 battalions for the British).

Division – This is the lowest level of command that one would find operating alone in combat. Divisions consisted of 2 to 4 Brigades.

Corps – During the Napoleonic Era, the Corps was just a small Army, often with integral artillery and cavalry units. A Corps for the French usually consisted of 3 Infantry Divisions, 1 Cavalry Division, and an Artillery Division (however, artillery were usually organized into Batteries of 6-12 guns or Grand Batteries of 30+ guns).

Army – This is the highest level of command ever found on a battlefield. As such, there generally will only be 1 Army Commander on each side during a battle. This is not a requirement, however. Armies consist of multiple Corps.

15.2 Main Menu
The first menu you will reach upon entering the Editor is the Main Menu for the Army Editor. This menu has the following options:

(C)ontinue – This option takes you past the Army Editor and into the Map Editor. It should only be selected once both the French and the Allied armies have been selected. There is a verification question, so you will be asked Y/N before it proceeds.

(G)enerate Army – This is the option you select either to build an army with Selection Points (see section 15.31) or to randomly select one. Selecting this choice will

take you to the Army Generator Menu (see section 15.3).

(E)dit an Army – Choosing this will allow you to custom create a new army, for either the French side or the Allied side (see section 15.4).

(L)oad Army File – This option allows you to pull in an army file from another scenario. This will allow you to use an army in multiple situations without having to recreate the army several times.

(S)ave Army File – This option allows you to save an army separately from the scenario you are creating/editing. This allows you to make a disk full of armies for later use in other scenarios (through use of the (L)oad Army File command).

15.3 Army Generator Menu

This sub-menu is where you will create armies, but not completely from scratch. If you wish to generate an army with random leaders, and a specific number of units (eg., 20 infantry, 5 cavalry, and 3 artillery) in a specific year of your choosing, you should select the (G)eneral Standard Unit Selection from this sub-menu. This will create an army quickly, but with some general direction given. Note specifically that you may use Selection Points (see section 15.31) to create this army and the computer will try to create an army with the number of units you desire but within the allotted point limit. If the point limit is reached, the number of units may not be as you wished.

The (S)tandard Unit Selection option allows you to choose standard units from the Standard Units Table (see section 20.3). This method also allows usage of the Selection Points system and is the best method for creating scenarios for two players.

(R)andom Generated Army is an option that creates a random army of a specified size (again, Selection Points are used). In this case, the computer will generate all of the necessary aspects of the army, including the organization and unit types.

15.31 SELECTION POINTS

Selection Points are points used to purchase units for an army. The question of whether or not to use the Selection Points method of choosing units is presented as "Purchase Units (Y/N)". The number of points to be used is determined by the player, and generally should be equal for the two sides. The cost of a unit in Selection Points is listed in the Unit Tables (section 20.3) and is based on the number of men in the unit, their firepower, Efficiency, and several other factors.

15.4 Editing an Army

Editing an army is, as previously mentioned, the most complex part of the Editor program. The aforementioned three-step process must be done completely and correctly or the army will not perform as desired.

15.41 LEADER CREATION

This is the first of the three parts of the army creation process. During this stage, you will create the "chain-of-command" for the army by naming all of the leaders, assigning the leaders their leadership bonuses (see section 9.0), and telling each leader who to report to. These factors must all be completed, or leaders will not give the proper command-control to their subordinates and objectives will be incorrect.

When the Leader Organizational Table first appears on the screen, it will display either the table you are editing from a previously created scenario, a randomly created table if you chose the (G)eneral Standard Unit Selection (see section 15.3), or the table from the Battle of Quatre Bras (if you are creating a new, custom scenario) as sample data. You may rename any or all of the leaders, change any or all of their bonuses, and reassign the command structure.

The Leader Organizational Table displays the vital information about the army's leaders in two sets of four columns, with the first column being the leader reference number (leader #), the second column being the size of unit that the leader commands (eg., Napoleon is usually an ARMy commander and in Quatre Bras in the French army, Bauduin is a BRiGade commander), the third being the name of the leader, and the fourth being the leader # that the leader in question answers to. This last column is very important because it determines the chain of command.

Example:

The concept of telling each leader who his superior is very simple as a concept, but is very complex in execution. As an example, try generating a new scenario. Once you are to the Main Menu of the army editor (as outlined above), you should choose (E)dit Army. You are then asked whether you wish to edit an Allied or a French army. Choose French. At this point, you are at step 1 of the army creation process, the Leader Creation Step. The Leader Organizational Table for the French forces at Quatre Bras is the default data automatically loaded in by the editor, and is convenient to use as an example. Before changing anything, examine the table. First, you will notice that Ney is leader # 0, has a SIZE of ARM (which means he is an ARMYcommander), and his SUPerior commander is # 61. Leader # 61 is reserved for leaders without superiors, and therefore means that Ney answers to no one on the field. He is the supreme commander for the French forces in this battle.

Going down the list, you will find that there are two Corps commanders, Reille and Kellerman, who answer to Ney (their SUP # is 0 and Ney is leader # 0). As a general rule, Corps commanders usually have several divisions under them, each with two or three brigades under them. However, Kellerman's Corps has but two units under him, and they are BRIGades! This is because historically only a small part of Kellerman's Corps was present at Quatre

Bras. This is only one example of the myriad of possible strange situations that may occur in the Leader Creation Step.

The leaders that are listed as "X" with varying leader sizes and bonuses are all unused leaders. They are assigned the name"X" in order to allow them to be recognized as non-leaders by the program.

The menu on the bottom of the Leader Organizational Table follows all of the conventions used so far in the program. The first letter of the desired command is highlighted to indicate that pressing this key will activate the chosen command. The commands available are:

<SPACE> – moves the cursor from the current leader to the next leader in the table.

(P)rior – moves the cursor from the current leader to the previous leader in the table.

(C)ontinue – takes you from the Leader Creation step to the Unit Organization step.

(E)xit to Main Menu – allows you to exit from the Leader Creation Step back to the Main Menu of the Army Editor .

(R)eorganize Leaders – will automatically reorganize the chain of command to prevent any impossible situations from occurring. This step is performed automatically upon pressing the (C)ontinue key.

(S)ize – will cycle through the leader sizes until the appropriate one is found. In order to continue going through the leader sizes keep pressing the (S) key.

(B)onus – displays the Leadership Bonus for the leader in question and allows you to change it by pressing the (B) key.

<RETURN> – allows you to edit the leader names. The maximum length of a leader name is 8 characters. However, there is a total character limit that cannot be exceeded. This limit is constantly displayed in the lower right of the menu and

is listed as # CHRS LEFT. The number after this is the number of characters left for the names of the leaders for the army being edited. In addition, renaming a leader is how you get to change the leader's superior. After renaming a leader, you are asked to type in the leader # of the desired superior.

15.42 UNIT ORGANIZATION

The next step after the Leader Creation process is Unit Organization. This step is reached by pressing the (C)ontinue key from the Leader Organizational Table menu listed above. The computer will organize things for a moment and then you will be presented with the Unit Organizational Table. The table looks similar to the Leader Organizational Table, but with a few changes. The leader information area is compressed, giving room for the addition of two lines just above the menu. These lines give the information necessary for each unit.

The unit information displayed shows the unit #, the unit size, the unit name, the unit's superior leader, and the leader that is attached to the unit, if any. For example, let's examine the unit organizational table for our custom scenario example from above:

Example:

After finishing with the Leader Organizational Table in our previous example, we hit the (C)ontinue key, and proceeded to the Unit Organization step. When first presented with the Unit Organization Table, we see the leaders we just edited listed in a short form above, with a unit listing in the middle of the screen and a menu below. The unit listing is the portion we will be concerned with.

The unit listing should read as follows:

##	SIZE	NAME	SUP LDR	ATTACHED
0	BATT.	1L/2	HUSSON	HUSSON

This is the organizational information for the first unit in the French army. This unit is unit # 0, a battalion, and is named "1L/2", or the 1st Light Infantry Battalion

of the 2nd Infantry Regiment. The unit is commanded by General Husson, and the good general is personally attached to this battalion. If, at this point, we hit the "N" key, we will be presented with the identical information for the next unit in the army, unit # 1. This unit is also a BATTalion, but is named 2L/2. It is also commanded by General Husson, but as the general cannot be in two places at one time, he is not attached to this unit.

The menu at the bottom of the Unit Organizational Table is similar to the one at the bottom of the Leader Organizational Table, and uses the same conventions.

(C)ontinue – this allows you to proceed to the third step in the army creation process, the editing of the individual units.

(G)oto – allows you to go to a specific unit number to edit it. This prevents having to scroll through a huge army to find the individual unit in question.

(N)ext unit – is the key used to scroll through the army one unit at a time and takes you to the next unit in order of unit number.

(P)rior – is identical to (N)ext except that it works backwards, scrolling you in reverse through the army.

(R)eorganize – is the step used to check for mistakes and impossible situations in the army. This prevents a leader from being attached to two units at once and such things. This step is performed automatically whenever you hit the (C)ontinue key.

(S)ize unit – allows you to change a unit's size from BATTalion on up through BRIGade, if desired.

<RETURN> allows editing of the unit, and is needed to change the unit name, superior leader, or attached leader.

(E)xit to Main Menu – provides a quick exit to the main menu. As all information is held in memory, this is a non-destructive exit.

Note that the names of the units cannot be longer than 8 characters in length and that the unit names on a side have a specific limit on the number of characters useable. This limit is constantly displayed in the lower right corner of the menu as # CHRS LEFT: and is updated after each unit is edited. This limit may not be changed or exceeded. Also note that, for computer design reasons, each army is limited to 30 leaders and 90 units.

15.43 UNIT EDITOR

The unit editor is the final step in the Army Creation process, and is the most detailed and demanding. In the unit editor you will choose the number of men in each unit and every other important piece of information about the unit. The items are as follows:

UNIT # – shows the unit number, as defined above, and is the reference number for the unit

UNIT NAME – appears just to the right of the unit number and is the name assigned during the Unit Organizational step.

 # MEN – is the number of men in the unit. This number may not exceed 3000. If this number is set to 0, then the unit will not appear during the deployment step and is assumed to be an unused unit.

#SKIRM. – represents the number of men in the unit capable of skirmishing. This number may not exceed the number of men in the unit.

GUNS:– is the number of artillery pieces in the unit. This number may never exceed 30.

TYPE 1 – ranges from 0 to 2 and is an indicator of the type of unit: 0 represents infantry, 1 is cavalry, and 2 means artillery.

TYPE 2 – is the unit "form" and is used to differentiate various types of troops. The chart of the Type 2s is in section 20.1.

TYPE 3 – is reserved for special information about the unit, and ranges from 0 to

28, with 28 being "no special". See section 20.1 for this chart.

NATION – shows the unit's nationality and is a number ranging from 0 to 18. See section 20.1 for the chart of nationalities.

WEAPON – displays what weapon the unit is armed with. Refer to the chart in section 20.5 for a listing of weapons and their weapon numbers.

MAX. EFF – is a simple numerical rendering of the maximum Efficiency of the unit. This number ranges from 2 to 9, with 2 meaning the unit has a maximum Efficiency of 28 and 9 indicating a maximum of 98 Efficiency. This in not the indicator of the unit's starting Efficiency, but the maximum it could achieve given time to rest. This allows for units to start "tired" or "depleted" and then "regroup" during the game.

EFFICIENCY– is the starting Efficiency of the unit. The scale is from 0 to 98.

FATIGUE – represents the amount of Fatigue the unit has to start with. As most of the time the units will start fresh, this number is often 0.

OP MODIFIER – is a bonus given to special units giving them more OP points. This bonus ranges from 0 to 4, with only cavalry usually getting the bonuses of 2 or higher. Light infantry often will get an OP modifier of 1. This number may not be negative.

REINF. TURN – is the turn that the unit will appear on the map as a reinforcement. If this turn is set to 0 or 1, the unit will start on the map. Otherwise, the unit will appear on the specified turn at the specified reinforcement square, as set in the set squares portion of the editor (see section 19.0).

REINF SQ – is the square where the unit will appear on the map as a reinforcement. This square should only be used by forces of one side. It gets very busy when units of both sides appear as reinforcements at the same reinforcement square.

MELEE VALUE – is a number ranging from 1 to 9 that represents the relative melee strength of the unit. As a general rule, infantry should range in value from 1 to 5, with 5 being the French Imperial Guard or an equally skilled unit, and cavalry should go from 6 to 9.

FORMATION – shows the initial formation of the unit. Refer to the chart in section 20.1 for a summary of the formations and their respective numbers.

DISRUPTION – allows you to start units with Disruption levels. This should only be done in the case of scenarios where units have theoretically already been in combat.

AMMO – provides a method for starting units with less than the normal 7 shots of ammunition.

FACING – is the initial facing of the units and corresponds to the compass in section 5.131.

READINESS – is the starting Readiness level for the unit. This number ranges from 0 to 7 and should normally start at 5.

% SKIRM OUT – is the percentage of skirmishers deployed at the beginning of the game. If you select this option, you will be presented with the numbers 0-4, with each number representing a 25% increase in the skirmisher out percentage. Thus, if you select 3, the unit will have 75% of its skirmishers deployed at game start. This is reflected on the screen.

ROAD MODE – shows whether or not the unit begins the game in road mode.

CAV RETREAT – option is only available to cavalry units (units with a Type 1 number of 1) and simply allows you to start units with this toggle set to yes.

ADVANCE – allows you to toggle the advance flag to yes.

FRONTLINE – provides a method for selecting which units in a stack are frontline at game start.

SKRM IN/OUT – is, as the previous three items, a toggle that tells whether or not

skirmishers are deployed at game start. If this toggle is set to N, no skirmishers will be deployed at game start, regardless of the setting of the SKIRM OUT %.

The menu at the bottom uses the same conventions as the previous army editor menus. It offers 1 new option, (S)kip 5 items, which allows you to move more rapidly through the unit to edit a specific part of the unit's statistics.

15.5 Army Editor Summary

Once you hit the (C)ontinue key from the Unit Editor, you will be sent back to the Army Editor Main Menu. At this menu you will be able to edit another army, go back through the army you just finished, or load in a separately saved army. Once you are through editing both the French and the Allied armies, you may hit the (C)ontinue key and you will proceed to the Map Editor. Once you do this, you may not return to the Army Editor until the scenario is complete. Of course, if you have made a mistake and need to go back, the best way to do this is to finish the scenario and then go back and re-edit the scenario, using the Edit Scenario option from the Main Menu.

16.0 MAP EDITOR

The second step in building a scenario is in creating the map. There are several options that you can choose here, ranging from using a map that you have previously created and saved off separately to having the computer create an instant map for you to use. Random maps are recommended for any do-it-yourself scenarios that are not based on a specific historical event as they are different every time and will make each scenario unique.

16.1 Map Editor Main Menu

The Map Editor Main Menu uses the following commands:

(C)ontinue – performs the same function

as elsewhere in the Editor program. It takes you out of the current Menu and on to the next step in the editing process. In this case, it takes you out of the Map Editor and on to the Deployment step.

(E)dit Map – allows you to edit an existing map and takes you to the Map Edit 1st Menu (see 16.2).

(L)oad a Map – lets you bring in a map that was previously saved. Remember that you must use the (S)ave Map command from this menu in order to save the map separately from the scenario for use with other scenarios. Otherwise, the map is integrated into the scenario and is not useable with another scenario.

(N)ew Map – clears the current map, allows you to choose the map size, and then takes you to the Map Edit 1st Menu (see 16.2). The size of the map is limited to 1600 squares total, so if you choose a size of greater than 40 squares in one direction, you may be limited to less than 40 squares in the other direction. The minimum map size is 12 by 12.

(R)andom Map – creates a new random map. This takes you to a special sub-menu that will allow you to create another map, edit the existing one, or save the existing one. See 16.4 for more details.

(S)ave Map – allows you to save the map separately so that you may then use it in future scenarios.

16.2 Map Editor 1st Menu

The menu reached by selecting either (E)dit Map or (N)ew Map is the Map Editor 1st Menu (called the 1st Menu because there is a 2nd level of menu beneath this one). This menu allows you to place any type of terrain on the map. The commands available are:

(N)ew Map – has the same effect as selecting this option from the Map Editor Main Menu (see 16.1).

(E)xit – takes you back out to the Map Editor Main Menu.

(O)ther Map – allows you to examine the map from a "strategic" view with little definition, but more viewing area. This is just like the "strategic view" available during the game (see 6.09).

Add (T)errain – is the function you select to place a specific terrain type in the cursor square. The square the cursor is in is represented by the highlighted square. The cursor is moved by the chosen movement compass (5.131). After selecting the square you wish to change with the Add (T)errain key, the terrain type you place is chosen by typing in the number of the terrain type you want. The list of terrain types is available in section 20.2.

(A)uto Terrain – is a special option that allows you to rapidly place many of the same terrain type. To enable this feature, press the (A) key and then select the terrain type you wish to place in the cursor location and other adjacent locations. Once you input the terrain type, the desired terrain type will appear in the cursor location and a special sub-menu will appear, informing you that your only two options are to move the cursor, placing the selected terrain type in the new square occupied by the cursor, or to return to the 1st Menu. Once you return to the 1st Menu, the (A)uto feature is deselected, allowing you to move the cursor without placing terrain.

(M)enu 2 – takes you to the Map Editor 2nd Menu (see section 16.3).

In addition to the above commands, there are several bits of information listed on the Map Editor 1st Menu. They include the terrain type and terrain number in the square currently occupied by the cursor, the elevation of the square currently occupied by the cursor, and the X,Y coordinates of that square. For example, if the following line was on the bottom of your Map Editor 1st Menu:

TERRAIN: WOODS/RIDGE 55 (2) X,Y: 15,23

the information would mean that the cursor is currently in square 15,23 and that the square is a level (2) elevation woods/ridge square with a terrain number of 55 (see section 20.2 for details on the terrain types).

The Map Editor 2nd Menu is simply an extension of the 1st Menu that allows several special functions.

16.3 Map Editor 2nd Menu

The Map Editor 2nd Menu is accessed through the 1st Menu and assists you in building a map quickly and easily. It allows you to build specific terrain features by telling the computer that you want to place a road, and then tracing the path the road takes. The computer will then automatically figure out the correct terrain types for the turns you make, and place the appropriate terrain type. The commands available are:

(R)eturn to Menu 1 – takes you back to the Map Editor 1st Menu.

Woods/Ri(D)ge – creates a wooded ridge. You can then trace the path of the ridge and the computer will follow. Of course, if you make a hill with this command, don't forget to raise the level of the clear squares in the middle, otherwise the hill will simply be a ring of ridge with a sunken center.

R(I)dge – is just like Woods/Ridge, but without the woods.

R(O)ad – allows you to lay a road. Remember that this road will not go "over" hills automatically. You must do this manually. The 2nd Menu terrain will simply overwrite any terrain that is "run over".

(S)tream – as road, but with a stream.

Ri(V)er – as stream, but with an impassible river.

(W)oods/Road – as with a road, but this time a wooded road.

S(U)nken Road – just like a road, but a sunken road instead.

Terrain is placed by selecting the desired terrain type and then moving the cursor in the desired direction. The options offered by the Editor, in regards to the direction you may move the cursor once you have selected a terrain type, are the only legal options for that terrain type.

16.4 Random Map

Random maps can be created by selecting the random map function from the Map Editor Main Menu. Once you have selected this function, you will be presented with a menu allowing you to set various levels for the major terrain features. Setting the item to level 1 will give you less of an item, while level 3 will give you more.

16.5 Summary

At this point, you should have completed all army editing and any map editing desired. The only remaining steps are deploying the armies, modifying the tables if desired, and setting any important squares needed. Pressing the (C)ontinue key from the Map Editor Main Menu will take you directly into the Deployment phase and will present you with the Deployment Main Menu.

17.0 DEPLOYMENT OF UNITS

The first menu that appears in the Deployment phase of the editing procedure is the decision as to whether or not you wish to (D)eploy Units or just (C)ontinue on to the Tables Editor. If you choose (D)eploy Units, you will be presented with another decision. In this case, you must decide whether to use (R)andom Deployment or (M)ap Edge Deployment. Random deployment means that the computer will deploy the units on the edges in a random fashion whereas Map Edge Deployment allows you to choose which of the four compass points (North, East, South, and West) the two armies set up on. Once these questions have been answered, you will be presented with the Deployment Menu.

17.1 Deployment Menu

The Deployment Menu is, for all intents and purposes, identical to the Cursor Menu (section 6.0). In addition, once you access a unit through use of the (SPACE) command, you will be presented with a different menu with many similarities to the Command Menu (section 6.2). The Deployment Menu commands are identical to 6.0 with the following exceptions:

(A)dd Unit – adds a unit to the map. This is only necessary if you are editing a previously created scenario and you have added units since the last time you edited the scenario. Then you may use this command to add a specific unit to the cursor location.

(E)xit to Main Menu – takes you out to the Deployment Main Menu where you may either choose to (D)eploy Units or (C)ontinue on to the Squares Editor.

17.11 Deployment Sub-Menu

The Deployment Sub-Menu accessed by hitting (SPACE) while the cursor is over a unit has the following options:

(R)oad Mode: – this is a toggle. The display directly to the right of this command in the menu section of the screen displays the current status of the unit. If you wish to change the unit in question into or out of road mode, press the (R) key.

(S)et Mode: – this is also a toggle, just like Road Mode. However, there are several modes, each corresponding to the formations listed in section 6.35. To change the units mode, select the (S) key and then choose the desired formation from the formations listed.

(E)lim – is an option included to allow you to delete a unit that shouldn't be on the map. This is only necessary if the scenario is a previously created one being edited and there are units on the map that were removed. In that case, use this option to delete the unit in question.

(N)ext Unit – simply takes you from the unit you have currently selected to the next highest unit in numerical order. For instance, if you are editing unit # 13, pressing the (N) key will take you to unit # 14.

(U)nit – allows you to select the next unit in a square. This is identical to the (U) command in the Command Menu (see section 6.1).

(Q)uit – takes you back to the Deployment Menu.

(D)ir: – allows you to change a unit's facing during the deployment phase. The direction the unit is facing is displayed just to the right of the (D)ir: on the menu.

To place a unit in a square, move the unit to the desired position and hit (N)ext or (Q)uit.

In addition to the above commands, the Deployment Sub-Menu uses the standard cursor information, to include the X,Y coordinates and the chosen movement compass. See section 5.13 for details.

17.2 Deployment Summary

The deployment phase allows you to place the units for both sides on the map in a specific manner to allow recreation of specific historical battle situations. Once deployment is complete, pressing the (C)ontinue key will take you into the Squares Editor. As before, you may not go back to a previous part of the editor once you go on, but you may re-edit a scenario once you have addressed all five parts to the editor.

18.0 SET SQUARES

Because the Editor is capable of creating scenarios of so many varying types, there must be some way of saying that one objective is worth more than another, where reinforcements come in, and so on. Therefore, there is the Squares Editor. Using the Squares Editor is known as "setting the squares" and this part of the editing process is called the Set Squares phase.

18.1 Square Types

The complete list of squares able to be changed in the Set Squares phase is as follows:

Victory Squares – are how you choose the value of a square in victory points. A square may be worth a lot to one side for capture, but little or nothing to the other side for capture.

Rear Area – the computer opponent focuses its attack/defense on these squares. It represents the supply source for the army.

Reinforcement Squares – are numbered 1 through 8 and should be remembered in regards to the reinforcements created in the Army Editor through use of the Reinf Turn and Reinf Square options.

Computer Defensive Lines – provide a method of telling the computer three distinct lines which represent the places to put its troops if winning, losing, or stalemating. They simply provide a guideline to the computer opponent on where to line up its troops.

Artillery Objectives – are again for the computer opponent and allow you to set up locations where you would like a computer opponent to move its artillery pieces.

Special Computer Objectives – provide a method of giving a computer opponent some idea of priorities.

18.2 Square Set Menus

Although each of the square set options has its own menu, the menus are almost identical. The total list of options is as follows:

(E)xit – takes you directly out to the Set Squares Main Menu.

(1-9) or (0-8) moves – is just the chosen movement compass (see section 5.131).

(N)ext – scrolls through the squares of the type you are currently editing. For example, if you are editing Allied Victory Square #4 and you hit (N), you will go to Allied Victory Square #5.

(S)et Sq. – tells the editor to make the X,Y coordinates of the square you are editing, Allied Victory Square #4 for example, and change it to be that of the cursor location. This means that if you move the cursor to 15,15 and then press the (S) key, you will set the square in question at 15,15.

(G)o ToSq.- Moves the cursor to the square being modified.

(C)ontinue – proceeds to the next type of square to edit. If, for instance, you are editing the French Victory Squares and you hit the (C) key, you will go on to the Allied Victory Squares. If you do this on the last square type, it will put you back to the Set Squares Main Menu.

(D)el – allows you to clear a square so that it doesn't exist.

In addition to the menu options, the X,Y location, terrain type, and elevation of the square currently occupied by the cursor is listed on the bottom line of the menu.

18.21 VICTORY SQUARES
When you are setting victory squares, you have certain limitations. First, no square may have a victory point value of more than 12700 points. In addition, there can only be 8 objectives on each side. When you initially enter the Set Squares phase, the computer automatically assigns what it thinks are reasonable objectives and victory squares. If you wish to change them you may. If you delete them, it assigns the deleted victory square an X,Y location of 255,255.

18.22 REAR AREA SQUARES
The rear area squares are set automatically by the computer upon entering the Set Squares phase. They represent the location of the baggage train, or the direction enemy units would have to travel to reach the baggage train, for the appropriate side.

18.23 REINFORCEMENT SQUARES

The 8 reinforcement squares may be used in any order by forces of either side. It is possible to have units from both sides appear in the same reinforcement square, even on the same turn, so special care must be taken to prevent such from happening, unless this is a desired effect.

18.24 DEFENSIVE LINES

The defensive lines represent lines that the computer opponent will use to set up its position. There are three lines for each side and each line has four squares that form it. These lines are chosen by the computer based upon the situation it finds itself in and the strategy chosen. Note that the computer will automatically set up an additional defensive line around the rear area square if the area is threatened.

Each line is made up of 4 points. These points form an intended line, usually shaped rather like a small hill, with the first point being to the left and back from the center. The second point is straight to the left of the center of the line, the third point is straight to the right of the center, and the fourth point should be to the right and back from the center. Thus, the line will have flanks that pull back, making a flanking maneuver more difficult.

The computer will automatically select these objectives when the Set Squares phase is initially entered; it is not necessary to set defensive lines. This option is only to allow maximum possible flexibility in the design of a scenario.

18.25 ARTILLERY OBJECTIVES

This is again a computer opponent function that is included to give you some extra control in setting objectives for computer controlled artillery pieces. Computer controlled artillery will try to go to the artillery objectives whenever possible.

18.26 SPECIAL OBJECTIVES

Special Objectives refer to special computer opponent objectives, not victory objectives. They are squares that the computer will try to take and hold, allowing you to make a square that is not a victory square a place that the computer will try to take or hold. The computer opponent will always try to take victory objectives, so these are just extra objectives.

19.0 TABLES EDITOR

The Tables Editor is the last part of the Editor and is where you can change the actual "guts" of the game system, from the effect of town on melee combat to the victory points needed to obtain various levels of victory. The Tables Editor Main Menu allows you to load tables saved off separately from a scenario, in much the same way as the map files can be saved separately (see section 16.0). Once you choose the (E)dit tables option, you will be presented with the Tables Menu.

19.1 Tables Menu

The Tables Menu is a large menu with options to change virtually everything within the program. All options on this menu are accessed by the letter to the left of the desired option. For instance, if you wish to change the Weapon Range Table, you press the letter "D" from the Tables Menu and the Weapon Range Table will appear. "Q" gets you back to the Tables Main Menu.

The options on the Tables Menu are:

A) # Game Turns

This allows you to change the number of game turns that the game will last. Each turn in 1/2 hour in length. The game will end after the last turn is over.

The maximum number of turns during a day that a game may last is listed in the editor charts (see 20.1). This number of turns varies with the month, based on the amount of daylight available for fighting. If the game is to exceed one day, simply plan for the number of daylight turns, then one night turn, and then the appropriate number of turns on the next day. During the night turn, there are certain restrictions. These are listed under the Battle Time Chart in section 20.1.

B) Time

Selecting "B" will show the year, month, and day of the battle, as well as the start time. All of these options may be changed. When you enter the Time Sub Menu, you will automatically be prompted for the new data. The time is in 1/2 hour increments, starting at 12 midnight (time point 0). Thus if the game starts on time point 23, the time is 11:30 AM.

C) Victory Points - Casualties

The sub-menu for this table will allow you to change the number of victory points awarded for casualties to Infantry, Cavalry, and Artillery. To modify a given victory level, simply press the "RETURN" key when the highlight bar is over the desired victory level.

D) Weapon/Range Table

This table allows you to change the firepower values for all of the weapons in the game at the various ranges. If, for example, you wanted to compress the scale of the game such that each square was 200 meters instead of 100, you could simply halve the ranges of all of the weapons and you will achieve that result. If, on the other hand, you want to try experimenting with a better form of shot for the French howitzers, you can do that too. It is recommended, however, that you do not change the numbers too much from the "historical" norm that they default to. Any extraordinary changes will yield possibly strange results. Use this option with care and planning.

Note that weapon 3 (SBR or Sabre) is reserved for non-firing weapons and may not be turned into a firing weapon. Any units equipped with this weapon will be unable to fire. In addition, weapon 2 is reserved for small cavalry rifles. All CRB restrictions will continue to apply.

E) Weapon Name Table

This will allow you to actually replace certain weapons with other weapons when used in combination with a change in the Weapon/Range Table. An example would be replacing all of the L18 (weapon number 13) cannons with LB (for longbow) to see how a longbow armed unit would perform against a unit of musket armed infantry. The value placed in the Weapon/Range Table would have to be derived by a method of your own choosing, but experimentation will eventually yield the desired result.

F) Terrain Cost Table

Modifying this table will change the OP point costs for units to enter squares of the various terrain types. Any changes made to this table will supercede the table in the charts section (see section 20.15). Any cost >15 will make the terrain impassable.

G) Target Terrain Fire/Melee Table

These are the percentage modifiers to the firer's firepower based on the terrain in the target's square. If the woods in the scenario you are designing were much better cover than the ones in the game, just change the table and watch the result. As above, any changes made in this table will supercede the table in section 20.6.

H) Firing Unit Terrain Fire/Melee Table

This is identical to the Target Table above, but applies to the terrain in the firer's square.

I) Melee Mode Table

The modifiers here are the melee strength percentage modifiers based on the two modes (formations) of the units involved. On the left side of the table are listed the attackers' possible formations while on the right are the percentage modifiers based on the target's formation, as listed in the upper right corner of the screen. For example, when you first select this option, the screen should list the DEF'S MODE: as LINE and the modifiers should be 100 if the attacker is in Line formation, 180 if the attacker is in column, and so on.

J) Fire Mode Modifier Table

This table lists the firepower percentage modifier, for both the firing unit and the target unit, based on formation (or mode). For example, if a column unit fires at a column unit, the firing unit has its firepower multiplied first by 30% for the firer being in column and then by 150% for the target being in column. Of course, this example is based on no changes to the tables. You may use this option to alter these modifiers. Anything set to 01 may not fire.

K) Priority Direction Retreat Table

There are eight directions that units may retreat. Since it is generally desired that your units retreat away from the enemy and towards friendly lines, the computer has a priority list of what direction to try to retreat in first. If that direction is blocked, it will try the next best direction and so on. However, you may have a special reason for wanting units to retreat in other than the most advantageous direction (or you may feel that another direction is more advantageous). This table allows you to control the priority of retreat direction. Note that this table uses the normal keypad.

L) Command Control Table

This table allows the player to change the range modifier for leaders when determining a unit's Command Control rating (which ranges from 10-30) during the Command Control Phase. Lower level leaders (Regiment or Brigade) usually have more control of a unit, so their numbers in this table should be higher than a superior level leader (Division, Corps, or Army). Note that for every square away from its leader, the computer adds a random modifier that reduces a unit's Command Control rating.

M) Victory Levels

The sub-menu for this table will allow you to change the number of victory points required to achieve the various victory levels. To modify a given victory level, simply press the "M" key when the highlight bar is over the desired victory level.

N) Minimum # Men for Elimination

When a unit takes enough damage, it loses all cohesiveness and ceases to exist as a fighting unit, regardless of the durability of the remaining individuals. Therefore, there is a threshold of number of men remaining in the unit at which all units are automatically eliminated. It defaults to 40, meaning that if an infantry unit is at only 50 men and takes 10 casualties, it is eliminated instead, causing 50 casualties.

O) Random # to Attempt Cavalry Charge

This is simply a random modifier shift that will allow you to control whether or not cavalry charges happen very often. If you don't like cavalry charges and feel that cavalry should charge less often, then just change the random modifier to 140. If you feel the opposite, then just change the modifier to 60.

P) Random # Infantry Enter Square

This one is identical to the random modifier for cavalry, but it applies instead to the chance of forming square. If you move the modifier on this one up and turn the modifier on the cavalry charges down, cavalry will become very ineffective.

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BATTLES OF NAPOLEON

CHARTS AND TABLES

20.0 CHARTS AND TABLES

20.1 Editor Tables

TYPE 1:

#	TYPE
0	Infantry
1	Cavalry
2	Artillery

TYPE 2:

#	TYPE
0	**LN (Line)** -- Normal line units of any type (infantry, cavalry or artillery)
1	**LT (Light)** -- Light units, either infantry or cavalry -- Normally all skirmishers if infantry
2	**HV (Heavy)** -- Heavier cavalry units, such as Heavy Dragoons or Cuirassier, or heavy artillery
3	**FT (Foot)** -- Foot artillery (the guns were towed by horses but the gunners usually walked)
4	**HS (Horse)** -- Horse artillery (both the guns and the gunners were transported by horse)
5	**OG (Old Guard)** -- Crack French Imperial Guard troops -- The best French infantry
6	**MG (Middle Guard)** -- Crack French Imperial Guard The next best French infantry
7	**YG (Young Guard)** -- Lower quality skirmishers, these troops were Guards only in name
8	**GR (Grenadier)** -- Elite infantry
9	**JG (Jaeger)** -- German or Russian skirmish infantry
10	**LW (Landwehr)** -- Levy infantry, generally of very poor quality
11	**MI (Militia)** -- 3rd rate troops, they were poorly equipped and trained
12	**MD (Medium)**
13	**KG (King's German Legion)** -- German troops employed by the British
14	**FU (Fusilier)** -- Non-elite infantry
15	**HI (Highland)** -- Scottish troops employed by the British
16	**RI (Rifle)** -- Infantry armed with a rifle, as opposed to the normal musket
17	**GD (Guard)** -- Elite troops of any nationality were generally referred to as Guards

TYPE 3:

#	TYPE
0	**CH (Chasseurs)** -- Light cavalry
1	**HU (Hussars)** -- Light cavalry
2	**LA (Lancers)** -- Light cavalry armed with lances to assist in melee against bayonet armed infantry
3	**DR (Dragoon)** -- Cavalry often armed with muskets as well as sabres
4	**CU (Cuirassier)** -- Heavy cavalry, armed with sabres and armored
5	**CA (Carabiniers)** -- Heavy cavalry
6	**CR (Corps Reserve)** -- Artillery units designated as Corps Reserve
7	**HV (Heavy)** -- Used with any troop type needing a Heavy Designation
8	**FI (Field)** -- Used to differentiate horse artillery from field artillery
9	**GR (Grenadier)** -- Elite infantry
10	**ED (Empress Dragoons)** -- Elite Heavy Dragoons
11	**PL (Polish Lancers)** -- Used by the French, the Polish were the first lancers
12	**DL (Dutch Lancers)** -- Light Dutch cavalry armed with lances
13	**GE (German)** -- German troops
14	**HU (Hungarian)** -- Hungarian troops
15	**CV (Chevauleger)** -- A generic term referring to Light Cavalry
16	**UH (Uhlan)** -- Light cavalry
17	**PT (Position)** -- Positioned artillery, such as the Austrians sometimes used
18	**RR (Regimental Reserve)** -- Reserve artillery
19	**FA (Fast)** -- Horse artillery that are treated more like foot because of lack of training
20	**MU (Musketeer)** -- Russian line infantry
21	**FU (Fusilier)** -- Non-elite infantry
22	**JG (Jaeger)** -- German or Russian skirmish infantry
23	**CO (Cossack)** -- Russian light cavalry that was skilled in "harassment" attacks
24	**HO (Household)** -- British elite cavalry
25	**RD (Royal Dragoon)** -- British elite cavalry, but armed only with sabre (unlike normal Dragoons)
26	**LD (Light Dragoon)** -- Light cavalry
27	**GD (Guard)** -- Elite troops of any type
28	**none**

NATIONALITY:

#	NATIONALITY	#	NATIONALITY
0	FR (France)	10	RU (Russia)
1	SW (Switzerland)	11	PR (Prussia)
2	NI (Northern Italy)	12	GB (Great Britain)
3	NA (Naples)	13	SP (Spain)
4	WE (Westphalia)	14	NE (Netherlands)
5	PO (Poland)	15	HA (Hannover)
6	BA (Bavaria)	16	BW (Brunswick)
7	WU (Wuttenburg)	17	PG (Portugal)
8	SA (Saxony)	18	SD (Sweden)
9	AU (Austria)		

FORMATION:

#	FORMATION
0	Line (Infantry)
1	Column (Infantry)
2	Square (Infantry)
3	Charge (Cavalry)
4	Counter-Charge (Cavalry)
5	Limbered (Artillery)
6	Unlimbered (Artillery)
7	Normal (Cavalry)
8	Rout (Cavalry and Infantry)
9	Dismounted (Cavalry (Non-sabre armed only))
10	Open (All)

BATTLE TIME:

MONTH	MONTH #	START TIME	END TIME	HOURS OF COMBAT
JAN	1	6:00	18:00	13
FEB	2	6:00	19:00	14
MAR	3	5:00	19:00	15
APR	4	5:00	20:00	16
MAY	5	4:00	20:00	17
JUN	6	4:00	21:00	18
JUL	7	5:00	21:00	17
AUG	8	5*:00	20:00	16
SEPT	9	6:00	20:00	15
OCT	10	6:00	19:00	14
NOV	11	7:00	19:00	13
DEC	12	7:00	18:00	12

DATE OF BATTLE:

DATE	YEAR OF BATTLE	DATE	YEAR OF BATTLE
1805	0	1811	6
1806	1	1812	7
1807	2	1813	8
1808	3	1814	9
1809	4	1815	10
1810	5		

NOTE: • Cavalry may not charge at night. • Night turns last one turn between the end time of one day and the beginning of another day.
• All movement and combat actions cost double OP points at night. • LOS is restricted to a maximum of 3 squares at night.

20.2 Terrain Table

Terrain Type	Terrain Elev.	Terrain #	Terrain Type	Terrain Elev.	Terrain #
Bridge - Horizontal	1	15	Redoubt - Vertical	1	77
Bridge - Horizontal	3	16	Redoubt - Vertical	3	78
Bridge - Vertical	1	17	Redoubt - Vertical	5	79
Bridge - Vertical	3	18	Ridge - Horizontal	2	37
Clear	1	0	Ridge - Horizontal	4	38
Clear	3	1	Ridge - Left to Lower	2	45
Clear	5	2	Ridge - Left to Lower	4	46
Fields	1	9	Ridge - Left to Upper	2	41
Fields	3	10	Ridge - Left to Upper	4	42
Fields	5	11	Ridge - Right to Lower	2	47
Hilltop	3	61	Ridge - Right to Lower	4	48
Hilltop	5	62	Ridge - Right to Upper	2	43
Redoubt - Horizontal	1	80	Ridge - Right to Upper	4	44
Redoubt - Horizontal	3	81	Ridge - Vertical	2	39
Redoubt - Horizontal	5	82	Ridge - Vertical	4	40

Terrain Type	Terrain Elev.	Terrain #
River - Horizontal	1	31
River - Left to Lower	1	36
River - Left to Upper	1	33
River - Right to Lower	1	35
River - Right to Upper	1	34
River - Vertical	1	32
River Branch - Left-Right-Down	1	75
River Branch - Left-Right-Up	1	74
River Branch - Up-Left-Down	1	76
River Branch - Up-Right-Down	1	95
Road - Horizontal	1	99
Road - Horizontal	3	100
Road - Horizontal	5	101
Road - Left to Lower	1	114
Road - Left to Lower	3	115
Road - Left to Lower	5	116
Road - Left to Upper	1	102
Road - Left to Upper	3	103
Road - Left to Upper	5	104
Road - Right to Lower	1	108
Road - Right to Lower	3	109
Road - Right to Lower	5	110
Road - Right to Upper	1	111
Road - Right to Upper	3	112
Road - Right to Upper	5	113
Road - Vertical	1	105
Road - Vertical	3	106
Road - Vertical	5	107
Road across Ridge - Horizontal	2	83
Road across Ridge - Horizontal	4	84
Road across Ridge - Vertical	2	85
Road across Ridge - Vertical	4	86
Road Branch - Left-Right-Down	1	96
Road Branch - Left-Right-Down	3	97
Road Branch - Left-Right-Down	5	98
Road Branch - Left-Right-Up	1	93
Road Branch - Left-Right-Up	3	94
Road Branch - Up-Left-Down	1	90
Road Branch - Up-Left-Down	3	91
Road Branch - Up-Left-Down	5	92
Road Branch - Up-Right-Down	1	87
Road Branch - Up-Right-Down	3	88
Road Branch - Up-Right-Down	5	89
Stream - Horizontal	1	19
Stream - Horizontal	3	20
Stream - Left to Lower	1	27
Stream - Left to Lower	3	28
Stream - Left to Upper	1	23
Stream - Left to Upper	3	24
Stream - Right to Lower	1	29
Stream - Right to Lower	3	30
Stream - Right to Upper	1	25
Stream - Right to Upper	3	26
Stream - Vertical	1	21
Stream - Vertical	3	22
Sunken Road - Horizontal	1	63
Sunken Road - Horizontal	3	64
Sunken Road - Left to Lower	3	73
Sunken Road - Left to Upper	1	65
Sunken Road - Left to Upper	3	66
Sunken Road - Right to Lower	1	69
Sunken Road - Right to Lower	3	70
Sunken Road - Right to Upper	1	71
Sunken Road - Right to Upper	3	72
Sunken Road - Vertical	1	67
Sunken Road - Vertical	3	68
Swamp	1	12
Swamp	3	13
Town	1	3
Town	3	4
Town	5	5
Wooded Ridge - Horizontal	2	49
Wooded Ridge - Horizontal	4	50
Wooded Ridge - Left to Lower	2	57
Wooded Ridge - Left to Lower	4	58
Wooded Ridge - Left to Upper	2	53
Wooded Ridge - Left to Upper	4	54
Wooded Ridge - Right to Lower	2	59
Wooded Ridge - Right to Lower	4	60
Wooded Ridge - Right to Upper	1	125
Wooded Ridge - Right to Upper	2	55
Wooded Ridge - Right to Upper	3	126
Wooded Ridge - Right to Upper	4	56
Wooded Ridge - Vertical	2	51
Wooded Ridge - Vertical	4	52
Wooded Road - Horizontal	1	117
Wooded Road - Horizontal	3	118
Wooded Road - Left to Lower	1	127
Wooded Road - Left to Lower	3	14
Wooded Road - Left to Upper	1	119
Wooded Road - Left to Upper	3	120
Wooded Road - Right to Lower	1	123
Wooded Road - Right to Lower	3	124
Wooded Road - Vertical	1	121
Wooded Road - Vertical	3	122
Woods	1	6
Woods	3	7
Woods	5	8

20.3 Unit Data

Unit #	Nation	Date	Type 1	Type 2	Type 3	# Men	# Guns/ Skirm	Max Eff	Melee	Op Pt Mod	Weapon	Purchase Points
0	0	0	0	0	28	1107	123	4	3	1	0	43
1	0	0	0	1	28	1107	1107	4	3	2	0	63
2	0	2	0	0	28	758	123	4	3	1	0	30
3	0	2	0	1	28	738	738	4	3	2	0	42
4	0	8	0	0	28	480	80	3	3	1	0	19
5	0	8	0	1	28	480	480	3	3	2	0	27
6	0	10	0	0	28	600	200	4	3	1	0	25
7	0	10	0	1	28	600	600	4	3	2	0	34
8	0	0	1	1	0	640	0	3	5	4	3	87
9	0	8	1	1	0	360	0	3	5	4	3	49
10	0	10	1	1	0	500	0	3	5	4	3	68
11	0	0	1	1	1	640	0	5	6	4	3	99
12	0	8	1	1	1	480	0	5	7	4	3	81
13	0	10	1	1	1	500	0	5	6	4	3	78
14	0	4	1	1	2	640	0	4	6	4	3	91
15	0	8	1	1	2	400	0	4	7	4	3	62
16	0	10	1	1	2	420	0	4	7	4	3	65
17	0	0	1	2	3	640	0	4	7	3	2	103
18	0	8	1	2	3	480	0	4	7	3	2	78
19	0	10	1	2	3	550	0	4	7	3	2	90
20	0	0	1	2	4	640	0	5	8	3	3	107
21	0	8	1	2	4	320	0	5	8	3	3	54
22	0	10	1	2	4	340	0	6	8	3	3	58
23	0	0	1	2	5	640	0	6	8	3	3	110
24	0	8	1	2	5	300	0	5	8	3	3	50
25	0	10	1	2	5	420	0	6	8	3	3	72
26	0	0	2	3	6	140	8	3	3	2	18	133
27	0	0	2	3	7	120	8	3	3	2	19	111
28	0	0	2	3	8	120	8	3	3	2	23	82
29	0	0	2	4	28	96	6	4	3	2	8	53
30	0	0	0	5	28	640	640	7	6	2	0	44
31	0	2	0	6	28	640	640	6	9	2	0	41
32	0	6	0	6	28	720	720	6	4	2	0	46
33	0	3	0	7	28	640	640	5	4	2	0	40
34	0	10	0	7	28	480	480	5	4	2	0	30
35	0	0	1	17	9	1000	0	7	8	3	3	174
36	0	10	1	17	9	800	0	7	8	3	3	139
37	0	0	1	17	0	1200	0	7	7	3	3	205
38	0	1	1	17	10	1000	0	6	7	3	2	178
39	0	10	1	17	10	800	0	6	7	3	2	142
40	0	3	1	17	11	1000	0	7	7	4	3	174
41	0	3	1	17	12	1000	0	6	7	4	3	171
42	0	8	1	17	12	1600	0	5	6	4	3	248

Unit #	Nation	Date	Type 1	Type 2	Type 3	# Men	# Guns/ Skirm	Max Eff	Melee	Op Pt Mod	Weapon	Purchase Points
43	0	8	1	17	2	800	0	6	7	4	3	137
44	0	10	1	17	2	920	0	7	7	4	3	160
45	0	0	2	5	28	140	8	7	3	2	18	154
46	1	0	0	0	28	738	123	4	4	1	0	31
47	1	4	0	0	28	1000	250	4	4	1	0	43
48	13	3	0	0	28	480	80	3	3	0	0	19
49	13	3	0	17	27	720	720	4	3	1	0	40
50	13	3	1	17	1	480	0	4	5	4	3	67
51	13	3	1	2	28	320	0	3	6	3	3	44
52	13	3	1	1	2	240	0	3	5	3	3	32
53	2	0	0	0	28	738	123	2	3	1	0	29
54	2	0	0	1	28	720	720	2	3	2	0	39
55	2	0	0	17	9	800	800	4	4	1	0	45
56	2	0	0	17	28	640	640	4	3	2	0	36
57	2	0	1	1	0	480	0	3	4	4	3	64
58	2	0	1	2	3	640	0	4	6	3	2	95
59	2	0	1	17	3	400	0	5	6	3	2	65
60	2	0	1	17	27	310	0	6	7	3	2	54
61	2	0	2	2	28	120	8	2	3	2	19	109
62	2	0	2	4	28	90	6	2	3	2	28	71
63	3	3	0	0	28	480	160	1	3	0	0	17
64	3	3	0	1	28	480	480	1	3	1	0	25
65	3	3	4	0	9	480	480	2	3	0	0	25
66	3	3	0	17	9	640	640	3	4	1	0	36
67	3	3	0	17	28	600	600	3	3	0	0	32
68	3	3	1	1	15	320	0	3	4	4	3	43
69	3	3	1	1	0	320	0	3	4	4	3	43
70	3	3	1	17	2	480	0	3	5	4	3	65
71	3	3	1	17	15	480	0	3	4	4	3	64
72	3	3	1	17	1	480	0	3	4	4	3	64
73	3	3	1	17	4	480	0	5	8	3	3	78
74	3	3	1	17	3	480	0	5	5	3	2	76
75	3	3	1	17	28	480	0	5	7	3	2	84
76	3	3	2	12	0	120	8	2	3	2	23	80
77	3	3	2	4	0	94	6	2	3	2	8	38
78	4	1	0	0	28	738	123	2	3	1	0	29
79	4	1	0	1	28	738	738	2	3	2	0	40
80	4	1	0	17	9	800	800	3	3	1	0	43
81	4	1	0	17	22	800	800	3	3	2	1	46
82	4	1	1	1	0	480	0	2	4	4	3	62
83	4	1	1	1	1	480	0	2	4	4	3	62
84	4	1	1	2	4	640	0	3	8	3	3	97
85	4	1	1	17	2	480	0	4	5	3	3	65
86	4	1	1	17	1	480	0	4	5	4	3	67

Unit #	Nation	Date	Type 1	Type 2	Type 3	# Men	# Guns/ Skirm	Max Eff	Melee	Op Pt Mod	Weapon	Purchase Points
87	5	2	0	0	28	738	123	4	3	1	0	30
88	5	2	0	1	28	738	738	4	3	2	0	39
89	5	2	1	1	1	480	0	4	5	4	3	67
90	5	2	1	1	0	480	0	4	4	4	3	65
91	5	2	1	1	2	480	0	5	6	4	3	74
92	5	2	1	2	4	560	0	6	8	3	3	96
93	5	2	2	12	28	120	8	3	3	2	24	82
94	5	2	2	4	28	95	6	3	3	2	28	72
95	6	0	0	0	28	738	123	2	3	0	0	28
96	6	0	0	1	28	720	720	2	3	1	0	35
97	6	0	0	10	28	480	0	0	3	0	0	16
98	6	10	0	17	9	840	840	5	3	1	0	48
99	6	10	1	2	4	720	0	5	8	3	3	121
100	6	0	1	2	3	480	0	4	6	3	2	73
101	6	3	1	1	15	720	0	4	5	3	3	98
102	6	9	1	1	1	720	0	4	5	4	3	100
103	6	9	1	1	16	720	0	4	5	4	3	100
104	6	10	1	17	17	720	0	7	8	3	3	125
105	6	0	2	1	28	110	7	2	3	2	23	70
106	6	0	2	12	28	120	7	2	3	2	6	77
107	6	0	2	2	28	140	8	2	3	2	4	124
108	7	0	0	0	28	738	123	2	3	0	0	28
109	7	3	0	0	20	640	640	2	3	0	0	33
110	7	3	0	1	21	640	640	2	3	1	0	34
111	7	3	0	10	28	640	0	1	3	0	0	22
112	7	3	0	1	22	640	640	2	3	1	1	35
113	7	3	1	1	0	480	0	3	4	4	3	64
114	7	3	1	1	15	480	0	3	5	3	3	64
115	7	3	1	2	3	640	0	4	6	3	2	95
116	7	3	2	12	28	120	6	2	3	2	23	62
117	7	3	2	4	28	100	6	2	3	2	24	60
118	7	3	0	17	9	640	640	6	4	1	0	40
119	7	7	1	17	27	640	0	6	8	3	3	109
120	7	3	2	17	28	130	6	4	3	2	4	96
121	7	3	2	4	28	110	6	5	3	2	24	69
122	8	0	0	0	28	738	123	2	3	0	0	28
123	8	5	0	0	28	480	0	2	3	0	0	17
124	8	5	0	1	5	480	480	2	3	1	0	26
125	8	0	0	0	9	480	480	3	3	0	0	26
126	8	0	0	1	22	480	480	2	3	2	1	27
127	8	0	0	17	9	480	0	4	4	1	0	19
128	8	0	1	1	15	480	0	2	4	4	3	62
129	8	0	1	1	2	600	0	2	4	3	3	76
130	8	0	1	1	1	960	0	3	4	4	3	128

Unit #	Nation	Date	Type 1	Type 2	Type 3	# Men	# Guns/ Skirm	Max Eff	Melee	Op Pt Mod	Weapon	Purchase Points
131	8	0	1	2	4	640	0	3	8	3	3	97
132	8	0	2	12	28	100	6	2	3	2	6	66
133	8	0	2	1	28	90	6	2	3	2	23	60
134	9	0	0	0	13	768	0	3	3	0	0	28
135	9	0	0	0	14	932	0	2	3	0	0	34
136	9	4	0	0	13	1080	0	3	3	0	0	40
137	9	4	0	0	14	1200	0	2	3	0	0	43
138	9	0	0	8	13	572	572	5	4	0	0	32
139	9	0	0	8	14	572	572	5	4	0	0	32
140	9	0	0	8	28	1000	1000	2	3	1	0	42
141	9	0	0	9	28	720	720	4	3	0	0	62
142	9	3	0	10	28	800	0	0	1	0	0	26
143	9	0	1	2	4	1200	0	5	8	3	3	190
144	9	0	1	2	3	1200	0	3	7	3	2	191
145	9	0	1	1	1	1580	0	5	6	4	3	229
146	9	0	1	1	15	1600	0	4	6	3	3	222
147	9	0	1	1	16	1600	0	4	6	4	3	227
148	9	0	2	3	17	92	6	3	3	2	19	84
149	9	0	2	3	18	90	6	3	3	2	7	50
150	9	0	2	3	19	88	6	3	3	2	25	39
151	10	0	0	0	20	738	0	3	3	0	0	27
152	10	8	0	0	20	320	80	3	3	0	0	13
153	10	9	0	0	20	654	130	3	3	0	0	26
154	10	0	0	0	21	738	0	3	3	0	0	27
155	10	0	0	0	22	738	738	4	3	1	0	41
156	10	8	0	0	22	320	320	4	3	1	0	18
157	10	9	0	0	22	654	654	3	3	1	0	36
158	10	0	0	0	9	738	0	5	4	0	0	29
159	10	8	0	0	9	360	0	5	4	0	0	15
160	10	9	0	0	9	654	0	5	4	0	0	28
161	10	7	0	11	28	1200	0	0	2	0	0	40
162	10	0	1	2	4	750	0	5	8	3	3	126
163	10	8	1	2	4	412	0	5	8	3	3	69
164	10	9	1	2	4	620	0	5	8	3	3	104
165	10	0	1	2	3	750	0	3	7	3	2	119
166	10	8	1	2	3	408	0	4	7	3	2	66
167	10	9	1	2	3	640	0	3	6	3	2	93
168	10	0	1	1	1	1200	0	5	6	4	3	186
169	10	8	1	1	1	960	0	5	6	4	3	149
170	10	9	1	1	1	1120	0	5	6	4	3	174
171	10	0	1	1	16	1200	0	4	6	4	3	170
172	10	8	1	1	16	960	0	4	6	4	3	136
173	10	9	1	1	16	1120	0	4	6	4	3	159
174	10	0	1	1	23	600	0	0	3	4	3	73

Unit #	Nation	Date	Type 1	Type 2	Type 3	# Men	# Guns/ Skirm	Max Eff	Melee	Op Pt Mod	Weapon	Purchase Points
175	10	7	1	1	0	1200	0	2	6	4	3	163
176	10	8	1	1	0	960	0	3	6	4	3	133
177	10	0	2	2	28	210	14	3	3	2	22	182
178	10	0	2	1	28	180	12	3	3	2	26	122
179	10	0	2	4	28	176	12	3	3	2	20	145
180	10	7	2	2	28	180	12	4	3	2	21	181
181	10	7	2	1	28	180	12	3	3	2	26	122
182	10	7	2	4	28	176	12	4	3	2	7	102
183	10	0	0	17	28	640	0	6	4	1	0	28
184	10	0	0	17	22	640	0	5	4	2	0	28
185	10	0	1	17	3	800	0	5	7	3	2	140
186	10	0	1	17	15	800	0	6	7	3	3	134
187	10	0	1	17	4	800	0	7	8	3	3	139
188	10	0	1	17	4	800	0	7	8	3	3	139
189	11	0	0	0	20	793	0	3	3	0	0	29
190	11	0	0	0	9	638	638	4	4	0	0	35
191	11	0	0	0	22	532	532	3	3	1	1	30
192	11	0	0	0	21	600	600	3	4	1	0	33
193	11	7	0	10	28	720	0	1	3	0	0	25
194	11	0	1	2	4	800	0	4	8	3	3	124
195	11	0	1	2	3	810	0	3	7	3	2	129
196	11	0	1	1	1	1500	0	5	6	4	3	233
197	11	0	1	1	16	1200	0	4	7	4	3	186
198	11	0	0	17	9	640	0	6	4	0	0	28
199	11	0	0	17	22	640	0	5	3	1	1	29
200	11	0	1	17	1	640	0	5	6	4	3	99
201	11	0	1	17	16	640	0	5	7	4	3	108
202	11	0	1	17	3	480	0	4	7	3	2	78
203	11	0	1	17	27	480	0	6	8	3	3	82
204	11	0	2	2	28	135	8	2	3	2	19	109
205	11	0	2	12	28	125	8	2	3	2	24	80
206	11	3	2	4	28	125	8	3	3	2	24	82
207	12	0	0	0	28	750	150	3	3	1	0	30
208	12	0	0	13	28	800	160	3	3	1	0	32
209	12	0	0	14	28	750	150	4	4	1	0	32
210	12	0	0	1	28	750	750	4	4	2	0	44
211	12	0	0	15	28	900	225	5	4	1	0	42
212	12	0	0	16	28	750	750	4	3	2	1	44
213	12	0	0	17	28	1443	1443	6	4	2	0	93
214	12	0	1	17	24	905	0	6	8	3	3	155
215	12	0	1	17	25	905	0	5	7	3	2	158
216	12	0	1	2	3	905	0	5	7	3	2	158
217	12	0	1	1	26	905	0	5	6	4	2	149
218	12	0	1	1	1	905	0	5	6	4	3	140

Unit #	Nation	Date	Type 1	Type 2	Type 3	# Men	# Guns/ Skirm	Max Eff	Melee	Op Pt Mod	Weapon	Purchase Points
219	12	0	2	2	28	120	6	3	3	2	27	84
220	12	0	2	1	28	115	6	3	3	2	28	72
221	12	0	2	4	28	110	6	4	3	2	7	51
222	13	0	0	0	28	740	0	1	3	0	0	26
223	13	0	0	11	28	600	0	0	2	0	0	20
224	13	0	0	1	28	1200	1200	2	3	1	0	64
225	13	0	0	8	28	720	0	3	4	0	0	27
226	13	0	1	2	27	615	0	4	8	3	3	95
227	13	0	1	2	3	700	0	1	6	3	2	98
228	13	0	1	1	1	700	0	2	6	3	3	93
229	13	0	1	1	0	700	0	1	6	3	3	91
230	13	0	2	2	28	116	6	2	3	2	19	82
231	13	0	2	1	28	130	8	2	3	2	29	88
232	13	0	2	4	28	110	6	2	3	2	8	38
233	14	10	0	0	28	720	120	3	3	1	0	29
234	14	10	0	0	28	600	100	2	3	0	0	23
235	14	10	0	9	28	720	720	3	3	2	0	40
236	14	10	1	2	5	480	0	3	6	3	3	70
237	14	10	1	1	3	480	0	3	5	3	2	69
238	14	10	1	1	1	480	0	3	6	4	3	72
239	15	8	0	0	28	640	0	3	3	0	0	24
240	15	8	0	1	28	800	800	3	2	1	0	43
241	15	8	1	1	1	640	0	3	5	4	3	87
242	16	1	0	0	28	650	0	3	3	1	0	25
243	16	3	0	0	28	640	0	3	3	1	0	24
244	16	10	0	0	28	672	0	3	3	1	0	26
245	16	8	0	1	28	640	640	3	2	2	0	35
246	16	10	0	1	28	672	672	4	3	2	0	38
247	16	8	0	10	28	640	0	2	3	0	0	23
248	16	4	1	1	1	480	0	5	6	4	3	74
249	16	9	1	1	1	690	0	6	6	4	3	109
250	17	3	0	0	28	776	110	3	3	1	0	31
251	17	3	0	1	28	776	776	2	3	2	0	42
252	17	3	1	1	3	594	0	3	6	3	2	87
253	17	3	2	1	28	115	6	3	3	2	28	72
254	17	3	2	4	28	110	6	3	3	2	7	50
255	18	1	0	0	28	600	0	3	3	1	0	23
256	18	1	0	1	22	540	540	3	2	2	1	29
257	18	1	1	2	3	800	0	4	6	3	3	111
258	18	1	1	1	1	800	0	5	6	4	3	124
259	18	1	2	1	28	115	8	3	3	2	28	97
260	18	1	0	17	28	700	100	5	4	2	0	33
261	18	1	1	17	27	960	0	6	8	3	2	174

20.4 Readiness Loss Table

Each time a unit changes objectives, it must check on the following table to see how many Readiness points are lost. The leader bonus refers to the bonus of the leader listed on the screen during the objective phase.

Leader Bonus	-2 Readiness	-3 Readiness	-4 Readiness	Leader Bonus	-2 Readiness	-3 Readiness	-4 Readiness
0	0%	30%	70%	8	20%	50%	30%
1	0%	35%	65%	9	25%	50%	25%
2	0%	40%	60%	10	30%	50%	20%
3	0%	45%	55%	11	35%	50%	15%
4	0%	50%	50%	12	40%	50%	10%
5	5%	50%	45%	13	45%	50%	5%
6	10%	50%	40%	14	50%	50%	0%
7	15%	50%	35%	15	55%	45%	0%

20.5 Weapon/Range Casualty Table

Wpn. Type	Wpn. #	Abbrev.	1	2	3-4	5-6	7-8	9-12
					Range to Target Square:			
Musket	0	MUS	3	1	0	0	0	0
Rifle	1	RFL	3	3	2	0	0	0
Carbine	2	CRB	2	0	0	0	0	0
Saber	3	SBR	1	0	0	0	0	0
12lb Gun	4	12G	17	8	6	3	2	1
9lb Gun	5	9G	13	7	4	2	1	1
8lb Gun	6	8G	12	6	4	2	1	1
6lb Gun	7	6G	9	5	3	1	1	1
4lb Gun	8	4G	7	4	2	1	1	0
3lb Gun	9	3G	5	3	1	1	0	0
2lb Gun	10	2G	3	2	1	0	0	0
24lb Howitzer	11	H24	19	7	5	2	1	0
5.5" Howitzer	12	H5.5	18	6	4	2	1	0
18lb Licorne	13	L18	16	6	3	2	1	1
10lb Howitzer	14	H10	14	5	2	1	1	0
9lb Licorne	15	L9	13	5	2	1	1	0
7lb Howitzer	16	H7	11	4	1	1	0	0
6lb Howitzer	17	H6	10	4	1	1	0	0
12lbGun/24lb How	18	12/24	18	8	6	3	2	1
12lbGun/10lb How	19	12/10	15	7	4	2	2	1
12lbGun/6lb How	20	12/6	13	6	4	2	1	1
12lbGun/18lb Lic	21	12/18	16	7	5	3	2	1
12lbG/6lbH/18lbLic	22	3GHL	14	6	4	2	1	1
8lbGun/7lb How	23	8/7	11	5	3	2	1	1
6lbGun/10lb How	24	6/10	11	5	3	1	1	1
3lbGun/6lb How	25	3/6	7	4	1	1	0	0
6lbGun/9lb Lic	26	6/9	11	5	3	1	1	1
9lbGun/5.5" How	27	9/5	15	7	4	2	1	1
6lbGun/5.5" How	28	6/5	13	6	4	2	1	1
4lbGun//5.5" How	29	4/5	12	6	3	2	1	0

The number under the range column for each weapon type is the number of casualties that weapon will inflict at that range per 100 men or per gun firing. These casualties are modified by other factors. Refer to section 20.6.

20.6 Fire and Melee Strength Modifiers

Target Location	Fire	Melee
Clear	100%	100%
Town	60%	80%
Woods	70%	70%
Fields	90%	100%
Stream	100%	100%
Bridge	100%	100%
Redoubt	20%	40%
Swamp	70%	70%
Sunken Road	80%	90%
River	0%	0%

Attacker Location	Fire	Melee
Clear	100%	100%
Town	100%	100%
Woods	100%	100%
Fields	100%	100%
Stream	100%	70%
Bridge	100%	70%
Redoubt	100%	100%
Swamp	100%	100%
Sunken Road	100%	100%
River	0%	0%

Attacker Formation	Fire
Line	100%
Column	30%
Square	30%
Charge	0%
Counter Charge	0%
Limbered	0%
Unlimbered	100%
Normal	60%
Routed	50%
Dismounted	75%
Open	60%

Defender Formation	Fire
Line	100%
Column	150%
Square	140%
Charge	100%
Counter Charge	100%
Limbered	80%
Unlimbered	40%
Normal	110%
Routed	60%
Dismounted	70%
Open	80%

MELEE MODE TABLE

Attacker	Line	Col	Sqr	Chg	Cchg	Limb	Ulim	Norm	Rout	Dism	Open
Line	100%	80%	100%	80%	80%	80%	80%	80%	200%	100%	120%
Column	180%	100%	180%	100%	100%	100%	100%	100%	250%	180%	200%
Square	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Charge	250%	250%	100%	100%	100%	300%	300%	150%	400%	250%	300%
C-Charge	250%	250%	100%	100%	100%	300%	300%	150%	400%	250%	300%
Limbered	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Unlimb	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Normal	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Routed	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Dismount	100%	80%	100%	80%	80%	80%	80%	80%	200%	100%	120%
Open	80%	70%	90%	70%	70%	70%	70%	70%	180%	80%	100%

Col = Column   **Sqr** = Square   **Chg** = Charge   **Cchg** = Counter-Charge
Limb = Limbered   **Ulim** = Unlimbered .   **Norm** = Cavalry Normal   **Dism** = Dismounted Cavalry

ADDITIONAL COMBAT MODIFIERS: *(All apply to both fire and melee unless noted otherwise.)*

Condition	Modifier
Readiness level	-5% per level below 7
Lancers Melee	130%
Unit defending in melee is flanked	25%
Unit attacking a flank in melee	150%
Unit firing at a flank	130%
Unit meleeing is out of ammo	90%
Disruption level	-10% per level
Number of men in target square	±1% per 50 men difference from 500 (99% at 450 men)
Number of men in firing unit	-1% per 50 men difference from 500 (99% at 550 men.)
Attacking unit has less than 6 OP points left	75%
Attacker Command Control	50% + 5% per level
Attacker Fatigue	-½% per point
Attacker Efficiency	Artillery or Fire Phase = Efficiency / 100 Melee or Cav Charge = (Efficiency - 18)/80
Melee Factor	+10% per level (Melee Factor of 6 = 160%)
Leader Bonus	+3% per bonus level of attached leader
Target of fire has Auto CAV retreat on	10% losses
Target is in Road Mode	200% losses
Attacking Skirmishers	+1% per 5 men (to maximum of 300) (Max of +60%)

• *Note: If attacking unit is not meleeing and is a 100% skirmisher unit with 100% skirmishers out, modifier is +60%*

Condition	Modifier
Defending Skirmishers	-1% per 5 men (to maximum of 300) (Max of -60%)

• *Note: If target unit is not meleeing and is a 100% skirmisher unit with 100% skirmishers out, fire modifier is -60%*
• *Note: If target unit is a 100% skirmisher unit with 100% skirmishers out and is in town, or woods, attacker melee modifier is -50%*

Condition	Modifier
Infantry unit firing with less than 500 men and is stacked with at least one other unit	120%
Unit is firing at a unit that is set to melee	140%
French/French ally in column or with skirmishers out	120% for fire combat only
Unit is a 100% skirmisher unit with 100% deployed	110%
British infantry in column or line formation	130%
French infantry in column formation	150%
Dismounted CAV melee	1/2 melee value
Russian Musketeer / Fusilier in column in melee	+1 melee value
Austrian Grenadier with skirmishers out	120% for fire combat only
Prussian Infantry	120%
Austrian unit in column	130%
Austrian unit in column meleed by cavalry	120%
Highland infantry	120%
Russian infantry in column	120%
Random Factor	80% to 120%
Level of Play	80% to 120%
Artillery unit with less than 16 men per gun	# men / 16 x number of guns
Elevation	± 10% per level (- if target is higher, + if lower)
Dismounted cavalry in melee	33%
Routed unit vs. cavalry	20%
Limbered artillery in melee	20%

20.7 Rally Table

Command Control	Morale: 20	40	60	80
10	40%	50%	60%	70%
15	55%	65%	75%	85%
20	70%	80%	90%	100%
25	85%	95%	100%	100%
30	100%	100%	100%	100%

The higher a unit's Morale and Command Control, the higher its chance to recover from Rout.

Russian units add 10% to the percentages on this table.

20.8 Operation Point Table

The Command Control rating of a unit determines how many OP points the unit receives. The maximum number of OP points a unit may receive is 15.

Command Control	OP points	Command Control	OP Points
10	8	20	9-11
11	8	21	9-11
12	8	22	10-12
13	8	23	10-12
14	8	24	11-13
15	8	25	11-13
16	8	26	12-14
17	8	27	12-14
18	8-9	28	13-15
19	8-9	29	13-15
		30	14-15

OP point modifier is added to the number calculated from the above table.

Russian units with an OP point modifier of 0 receive a -1 to their final # of OP points received.

Austrian units in column receive a -1 to their final # of OP points received.

20.9 Fatigue Table

Action	Cost
Fire Combat	
Infantry and Cavalry	+ 4
Artillery	+ 10
Melee Combat	+ 8
Movement	+ 0 or 2 *

*Whether a unit gains 0 or 2 Fatigue per square entered is heavily dependent on the terrain type entered and the cost in OP points to enter that square

20.10 Efficiency Table

Action	Cost
Unit moved onto or adjacent to by a freindlyretreating unit and unit has between 20 and 60 efficiency	-2
Unit retreats	-6
Per 5 men lost as casualties*	-1
Unit forces an enemy unit to retreat by fire, melee, or cavalry overrun	+6
Unit forces an enemy unit to rout by fire or melee	+12

*For units with less than 800 men. If a unit has over 800 men, the unit must lose a proportionally higher number of men to suffer Efficiency loss.

20.11 Disruption Table

When units suffer losses they may gain Disruption levels. Units will have a chance of gaining Disruption levels if:

> The unit suffers >3% losses in a single shot (5 men lost for artillery)
> Morale of the unit is <20 and unit suffers a loss
> Unit is moved onto or adjacent to by a retreating unit

If any of the above occur, then the unit takes a Disruption Test based on the following chart. Each occurrence of the above causes a Disruption Test to be taken.

Morale	Disruption Levels Gained:		
	+0	+1	+2
80+	100%	0%	0%
60	80%	20%	0%
40	60%	40%	0%
20	40%	40%	20%
0	20%	40%	40%
-20	0%	40%	60%

Special modifiers:
- Units in line formation are at -20%
- Cossacks under Artillery fire are at -5%
- Units in square formation receiving a cavalry charge get a +40% bonus
- Units in column formation receiving a cavalry charge get a +10% bonus
- French / French ally units in column or with deployed skirmishers get a +20% bonus
- British units in line or column get a +30% bonus
- Austrian grenadier units with skirmishers deployed get a +20% bonus
- Austrian units in column get a +30% bonus
- Austrian units in column under attack by meleeing cavalry get a +20% bonus
- Highland units get a +20% bonus
- Russian infantry in column get a +20% bonus
- Prussian infantry get a +20% bonus

Note that all modifiers are cumulative. Therefore, Austrian grenadiers in column under attack by enemy cavalry are at +60%.

Other Special Notes:
- Charging cavalry automatically gain 2 Disruption levels, in addition to any gained from fire or melee combat
- Infantry units not in square formation and attacked by charging cavalry automatically gain 2 Disruption levels
- Units suffering >14% losses in one shot automatically gain 5 Disruption levels (exc: Artillery)

20.12 Disruption Recovery Table

Recovery from Disruption effects is based on Command Control. A unit may lose Disruption levels if it is not routed. The percentages listed below are the chance of recovering the number of Disruption levels listed if at the appropriate Command Control level. Therefore, a unit with a Command Control of 16 would have a 20% chance of recovering 0 Disruption levels, a 75% chance of recovering 1 Disruption level, and a 5% chance of recovering 2 Disruption levels.

Command Control	Disruption Levels: -0	-1	-2	Command Control	Disruption Levels: -0	-1	-2
10	50%	50%	0%	20	0%	75%	25%
11	45%	55%	0%	21	0%	70%	30%
12	40%	60%	0%	22	0%	65%	35%
13	35%	65%	0%	23	0%	60%	40%
14	30%	70%	0%	24	0%	55%	45%
15	25%	75%	0%	25	0%	50%	50%
16	20%	75%	5%	26	0%	45%	55%
17	15%	75%	10%	27	0%	40%	60%
18	10%	75%	15%	28	0%	35%	65%
19	5%	75%	20%	29	0%	30%	70%
				30	0%	25%	75%

20.13 Leader Command Control Modifier Table

Leader Bonus	****	***	**	*
0	0%	0%	0%	100%
1	0%	0%	12%	88%
2	0%	0%	23%	77%
3	0%	0%	34%	66%
4	0%	0%	45%	55%
5	0%	0%	55%	45%
6	0%	12%	55%	34%
7	0%	22%	55%	23%
8	0%	33%	55%	12%
9	0%	45%	55%	0%
10	0%	55%	45%	0%
11	11%	55%	34%	0%
12	22%	55%	23%	0%
13	33%	55%	12%	0%
14	45%	55%	0%	0%
15	55%	45%	0%	0%

The Morale of the unit attached to the leader also affects the above percentages.

20.14 Cavalry Charge Table

In order to charge, a cavalry unit must:

- have 6 OP points after declaring the charge
- be in charge mode
- not start the charge in an enemy ZOC
- choose a target within 8 squares

- have a morale of >24
- have less than 4 disruption levels
- pass a morale test (see below)

MORALE TEST

Morale	Disruption: 0	1	2	3
30	40%	25%	10%	0%
40	50%	35%	20%	5%
50	60%	45%	30%	15%
60	70%	55%	40%	25%
70	100%	65%	50%	35%
80	100%	75%	60%	45%
90	100%	85%	70%	55%

Note that counter charges use the same morale chart and are under the same restrictions as the charges. Also, the above percentages are able to be changed in the editor.

ENTERING SQUARE

Infantry units that try to enter square during an enemy charge will do so according to the following chart:

Morale	Disruption: 0	1	2	3
20-39	30%	15%	0%	0%
40-59	60%	45%	30%	15%
60-79	90%	75%	60%	45%
80+	100%	100%	90%	75%

Units with greater than 3 levels of disruption or that have a morale of less than 20 may not attempt to enter square. Units in line formation have a -10% to the above chart.
Infantry that are comprised entirely of skirmishers have the following modifiers:

- 100% skirmishers out -- cannot enter square
- 75% skirmishers out -- -30%
- 50% skirmishers out -- -20%
- 25% skirmishers out -- -10%

Units that fail to enter square will test on the following chart to see if they gain disruption levels:

Morale	+1 Disr	+2 Disr	+3 Disr	+4 Disr	+5 Disr
20-39	10%	10%	10%	20%	50%
40-59	20%	10%	10%	20%	40%
60-79	30%	10%	10%	20%	30%
80+	40%	10%	10%	20%	20%

Units with morale of lower than 20 automatically gain 5 levels of disruption if they are charged by cavalry.

20.15 OP Point Cost Table

Terrain Entered	Infantry	Cavalry	Artillery
Clear	2(3)	1(2)	2(3)
Town	4(6)	3(5)	3(5)
Woods	4(6)	3(5)	6(9)
Fields	2(3)	1(2)	3(5)
Stream	4(6)	3(5)	5(7)
Bridge	4(6)	3(5)	5(7)
Redoubt	3(5)	2(3)	3(5)
Swamp	4(6)	P(P)	P(P)
Sunken Road	3(5)	2(3)	3(5)
River	P(P)	P(P)	P(P)
Higher Elevation	+2	+1	+4

ADDITIONAL COSTS

Action Performed	Infantry	Cavalry	Artillery
Change Facing without entering a new square	+1	+1	+1
Change facing while entering a new square	+1**	+0	+0
Change Formation if not in ZOC	+2*	+2*	+2
Change Formation if in ZOC	+6*	+6*	+6
Enter an enemy ZOC	+1	+1	+1
Leave an enemy ZOC	+2	+2	+2
Move away from objective	+1-3	+1-3	+1-3
Fire in Fire Phase	1	1	4
Melee in Melee Phase	2	2	2
Stack with a friendly unit	+1	+1	+1
Deploy/Recall skirmishers	1	1	1
Change Road Mode status	2	2	2

Units in line formation pay double the listed cost, except for units which are comprised entirely of skirmishers and which are 100% skirmishers out.

Horse artillery move as if they are cavalry.

The cost listed in parentheses is the cost for moving diagonally while the cost listed to the first is the cost for entering a square orthogonally (moving non-diagonally).

Units that move non-diagonally from road/town squares to road/town squares while in road mode may do so at a cost of 1 OP point per square.

Units may also use a special one-square movement known as ZOC-to-ZOC movement. This entails moving from one square of an enemy ZOC to another square of an enemy ZOC by moving through a friendly unit. The moving unit must pay the cost to leave a ZOC, plus the cost to enter a ZOC, plus the cost of entering the target square. In addition, the square being entered must be occupied by a friendly unit.

Units may always move at least one square. This requires all of a unit's OP points and the unit must have started with at least 1 OP point.

* Non-French pay one additional point.

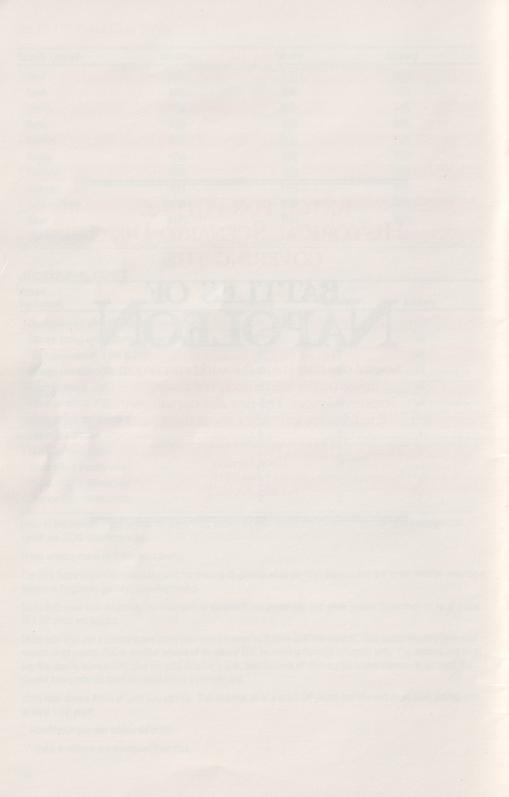** Units in column are exempted from this.

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This is simply a summary of all of the commands available from the Command Menu. Although not all of them have been explained in this section, the brief description below will tell you where to find more detailed information on the command. They are listed here for convenience:

(0) -- This command centers the map on the unit (the command is "5" if using the alternate keypad).

(1-8) – moves the unit in the desired direction as indicated by the movement compass at the bottom right of the screen ("1-9" for alternate keypad users)

(A)dvance sets the unit to advance into a square vacated by the retreat of enemy unit(s) in front of the advancing unit. To be eligible to advance, that friendly unit's fire or melee combat must have caused the enemy unit to retreat. As this is a toggle, if the ADV: flag is already set to Y, pressing the "A" key again will set it back to N (see section 6.42).

(D)irection permits you to change the facing of the accessed unit (see section 6.36).

(F)ire calls up the Fire Menu which permits the giving of fire commands (see section 6.41).

(G) changes the cavalry auto-retreat toggle (see section 6.434). For infantry units and artillery units, it changes the unit's Road Mode status from Normal to Road (see section 6.351).

(H) increases the number of skirmishers out by 25% of the total skirmishers in the unit until 100% is reached. Once 100% are out, pressing the "H" key again resets the % out to 0% (see section 6.354).

(I)nverse allows the accessing of a higher level of organization to give certain fire orders to all units of that formation. A sub menu allowing you to select NO PLOT or NO FIRE orders for the entire organization. Units accessed may be from regiment through army (see section 6.41).

(J) highlights the accessed unit's objective square (refer to section 5.0).

(K) orders skirmishers out of the unit. If skirmishers are already out, they are then ordered back in by this command. This also causes the SKRM number on the Infantry Command Menu to be highlighted.

(M)elee plots the unit to melee any enemy units in the square that the unit faces. If the unit is already under orders to melee, pressing this key will order to unit NOT to melee (see section 6.42).

(N)ext accesses the next friendly unit in the Order of Battle (see section 12.1).

(Q)uit exits from the unit to the Cursor Menu (see section 6.1).

(R) switches the unit between frontline status and non-frontline status (see section 6.341).

(S)elect formation allows you to change formation for the unit in question. The types of formation available to the unit will be automatically listed and offered to you (see section 6.35).

(SPACE BAR) switches between the Command Menu pages for the currently accessed unit. This is a toggle so hitting the SPACE BAR again will return you to the 1st page of the Command Menu (see section 6.32).

(T)errain removes the unit shapes from the map allowing you to examine the terrain underneath.

(U)nder allows you to access the next unit in the square. If selected when there is only one unit in a square, it will result in no response.

(V)iew highlights all squares that the currently accessed unit can see and fire at with its weapons (see section 6.41).

(W) highlights all victory squares on the map, first for one side and then for the other.

(X) force marches the unit, adding 1 OP point at a cost of adding 6 Fatigue points.

(Z) aborts all of the orders given to the currently accessed unit since its most recent access. If you (Q)uit a unit and then pick it back up, you may not abort any previously given orders (see section 6.32).

Questions or Problems?

Our main business telephone number is (415) 964-1353. We also have a Technical Support Hotline number: (415) 964-1200, which you can call if you have problems with your disk or need a clarification of the game and/or rules. Both numbers can be called every workday, 9 to 5 Pacific Time.